

STAFF POSITION: SEISMIC NETWORK ENGINEER
UNIVERSITY OF UTAH, SALT LAKE CITY, UTAH

The University of Utah Seismograph Stations is seeking applicants to fill the position of Seismic Network Engineer who will work with other professional staff to install, operate, repair, and maintain ~230 stations forming part of the University of Utah's regional seismic network. Stations consist of seismic sensors, analog and digital data acquisition systems, and associated telemetry equipment and are sited both in the urban built environment and in remote field locations throughout Utah and in parts of neighboring states, and Yellowstone National Park. The Seismic Network Engineer is involved in the installation of new seismograph stations and maintains a detailed record of station visits and a written repair history for specified equipment items.

For new installations, the Seismic Network Engineer will perform site construction work and install delicate instrumentation; selecting sites and/or interacting with property owners may be required. Job requires frequent day trips and occasional overnight travel to field installations. Some of the travel may be extensive, from days to weeks. Additional duties may be assigned relating to the installation and/or maintenance and operation of other types of seismic monitoring instrumentation. In the event of an earthquake aftershock response, the successful applicant must be prepared, on short notice, to rapidly deploy portable seismic recording equipment, potentially requiring travel for three or more days.

Principal Duties: Shared responsibility for the operation, repair, and maintenance of an extensive seismic network of approximately 230 sites. Field sites are both in the urban built environment and in remote locations. Maintenance includes both analog and digital data acquisition systems and associated telemetry. For new installations: selects sites, interacts with property owners, purchases equipment, performs site construction work, and installs delicate instrumentation. May supervise one or more individuals assisting in the station installation process. Works frequently with IT specialists to establish data communication links through off-site firewalls and works with telecommunications engineers to establish end-to-end system throughput. Maintains a detailed database of station parameters and repair histories. Interacts with original equipment manufacturers and software engineers to ensure data collection integrity. Job requires frequent day trips and occasional overnight travel to field installations. Some of the travel may be extensive. Additional duties may be assigned related to the installation, maintenance, and operation of other types of seismic network instrumentation, including portable seismographs as part of post-earthquake deployments.

Qualifications: Bachelor's degree (or equivalent) in computer science, engineering, or related field. Experience with at least some of the following data communications hardware: cellular modems, routers, switches, firewalls, and terminal servers. Experience with diverse data transmission media (e.g., T-1, ethernet, DSL and serial circuits). Experience with analog

telemetry systems preferred (narrowband FM radio, VCOs, discriminators and digitizers). Experience with seismic monitoring equipment preferred (Reftek, Kinometrics, Geotech, etc.)

Experience with Windows and with UNIX or Linux (experience with Python and C-programming helpful). Valid Utah driver's license and proof of insurability. Demonstrated project management and interpersonal communication skills. Diversity of electronic and mechanical skills desirable. Applicant must be self-motivated and capable of problem-solving both individually (unsupervised) and as a team member. Must be capable of performing field work requiring extensive travel, often under inclement conditions, and capable of strenuous physical labor (e.g., able to lift and carry batteries, equipment, and site construction materials commonly weighing 50 lb or more).

To apply online, see instructions at <https://utah.peopleadmin.com/postings/75762>.

The University of Utah is an Affirmative Action/Equal Opportunity employer and is committed to diversity in its workforce.